

* SWBAT observe what happens to acceleration as force goes up
(keeping the same mass)

Sep 6-2:31 PM

Centering...

Welcome!!!

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SECA Physics
Wednesday 23 October 2013

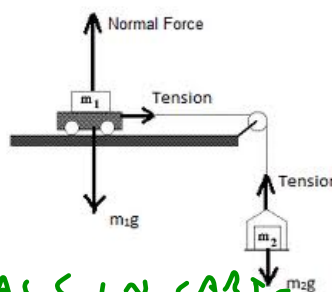
See Leslie to
schedule make-up
test...

- * Pick up:
 - slip of paper (for later)

Opening Question:

What did we do with the carts on Monday? What variation will we try today?

SAME PULL, DIFFERENT MASSES IN CARTS
SAME CART, DIFFERENT PULL



Sep 7-7:04 AM

Changing the cart's mass while keeping the same pull to speed it up.

Think Pair Share:

1. Look at the graph (now back at me) and think about what it is telling us. Make as many observations as you can.

---- SILENT ----

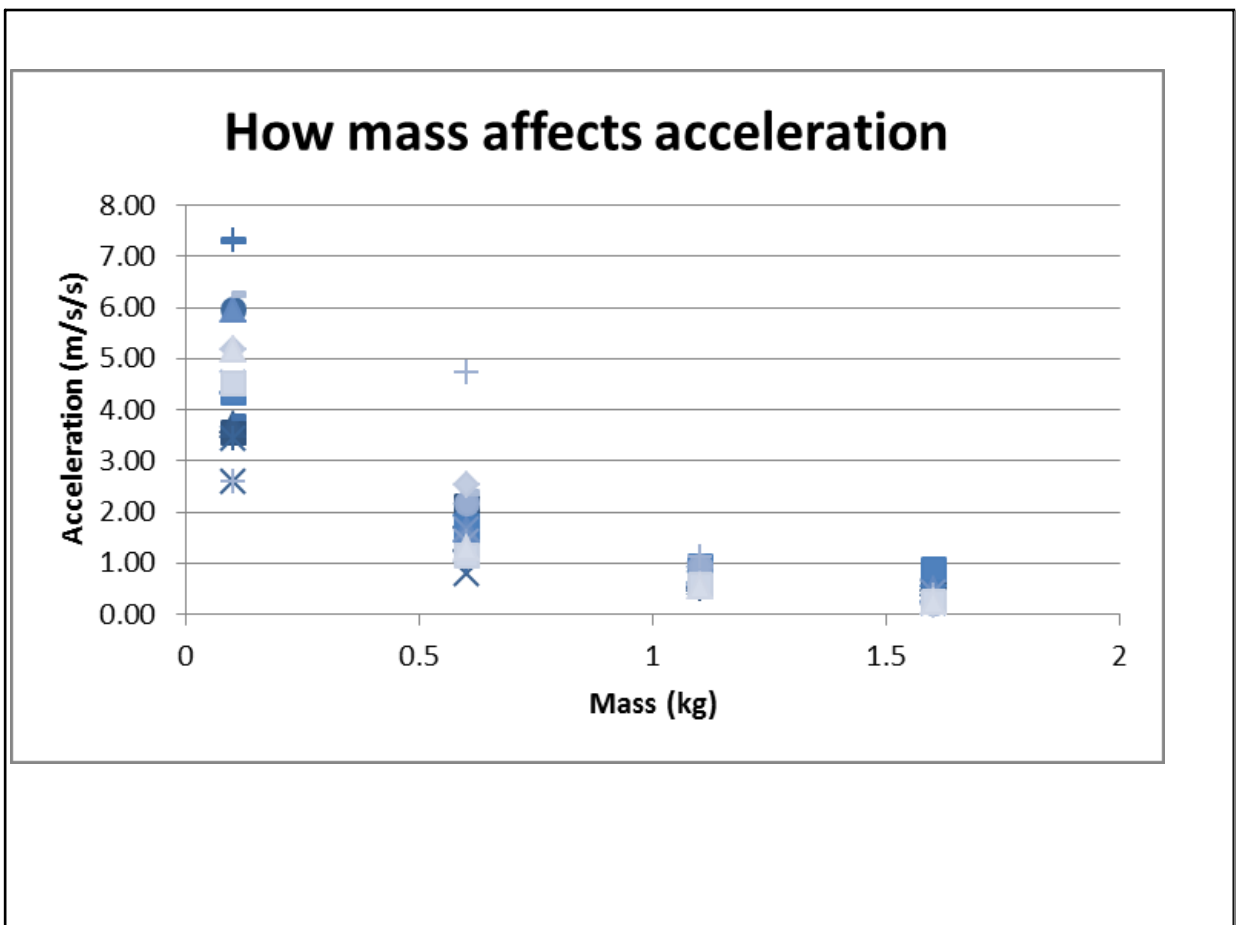
2. Talk with people at your table about what you observed and what you think it is telling us.

---- TALKING ----

3. Everyone should have something they can share with the whole class about the graph.

---- LISTENING ----

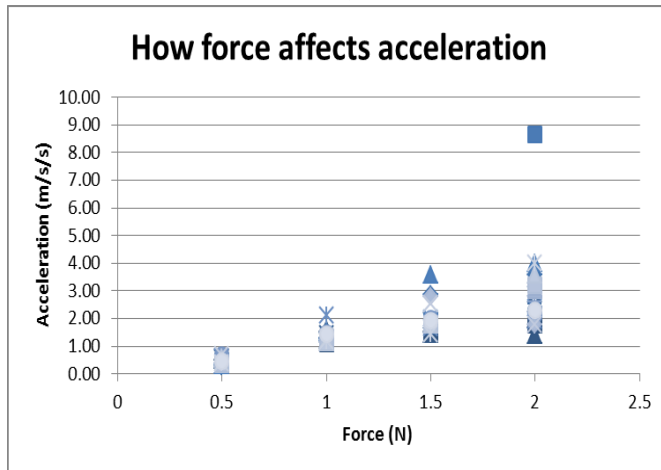
Oct 26-7:31 AM



Oct 21-1:23 PM

KEEPING the SAME cart's mass while
CHANGING the pull to speed it up?

- timer
- recorder
- equipment manager



CART = 500g

50g

100g

100g + 50g

200g

3 TRIALS
EACH PULL

BACK TO BACK
TAPE

Oct 25-7:28 AM

What did we see today?

MORE FORCE \Rightarrow MORE ACC.

What did we see Monday?

MORE MASS \Rightarrow LESS ACC.

Oct 26-7:49 AM

MORE MASS \rightarrow LESS ACC:
MORE FORCE \rightarrow MORE ACC:

Graphs of our experiments...

Newton's 2nd Law:

$$\rightarrow F = m a$$

FORCE = MASS · ACCELERATION

MON: $\langle \text{SAME} \rangle = \uparrow \cdot \downarrow$

 TODAY: $\uparrow = \langle \text{SAME} \rangle \uparrow$

Oct 28-6:55 AM

Eureka - Change in speed...

Connect the Physics Dots...

<http://www.youtube.com/watch?v=DzDBe7ScDeM>

Newton's 1st Law: Objects ...

STAYS...

Inertia is the name for that!

Mass is a measure of inertia

Forces change motion \Rightarrow cause acceleration

Newton's 2nd Law: $F = ma$

Oct 27-7:25 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. **Monday's** experiment involved

- ☒ A. always using the **same** pulling force on the car
- ☐ B. always using **different** pulling forces on the car
- ☐ C. neither

2. **Today's** experiment involved

- ☐ A. always using the **same** pulling force on the car
- ☒ B. always using **different** pulling forces on the car
- ☐ C. neither

3. More pulling force means

- ☒ A. more acceleration
- ☐ B. less acceleration
- ☐ C. the same acceleration

Oct 8-6:48 AM